

PHOTOGRAPHY

FAQ

Q Why does flash photography produce over- or underexposed shots?

A Flash is meant to help out in poorly lit conditions. But the twinkle of flashes at pop concerts shows many people believe their camera's flash can illuminate subjects 100m away.

Most flashes are designed to work within a range of 10 feet, or just over 3m. If you try to capture subjects further away, you're shooting an area that the flash doesn't have power to illuminate. If you're near the limit of your camera's flash range, increasing the ISO speed can produce a brighter picture.

Using flash at close range can cause the subject to be overexposed as lots of light bounces back into the lens. The best cameras detect from their autofocus setting when a subject is close and reduce the shutter speed for an accurate exposure.

Ben Pitt

Music and photography expert

ben@computershopper.co.uk

EPSON Perfection V700 Photo

★★★★★

£378 inc VAT



Epson's V700 Photo combines high-quality flatbed scanning with transparency scan quality that's comparable to that of a dedicated film scanner. It's a substantial unit, rising 15cm from the desk and weighing 6.6kg. This is largely down to the use of two separate scanning mechanisms, one under the glass plate for reflective media and a second one built into the lid for transparencies.

The transparency unit accepts any type of film that fits within its 10x8" scan area. Various film and slide holders are included to accommodate up to 24 exposures of 35mm film, 12 slides or two exposures of medium- or large-format film. A strong software bundle includes Adobe Photoshop Elements 3, ABBYY FineReader 6 for optical character recognition (OCR) and SilverFast SE6, which provides advanced scanning controls, though we didn't find Epson's standard TWAIN driver lacking. This comprises three modes: Full Auto, which automatically recognises document type and chooses suitable settings; Home, with various templates and basic user control; and Professional, which presents the full range of controls.

Scans are reasonably fast at six seconds for a preview, 15 seconds for a 300dpi A4 scan and 26 seconds for an A4 scan at 600dpi. Switching to the transparency unit, the lamp takes around a minute to warm up, after which 24 negatives take around 45 seconds to preview and 16 minutes to scan at 2,400dpi. The Digital ICE image restoration adds to scan times but is highly effective at repairing damaged photos, removing creases and tears from prints and



dust and scratches from transparencies. A secondary dust removal option is also included. While this was quicker and equally successful, it tended to remove fine detail from images. The Grain Reduction option worked well, although higher settings softened detail in images. Color Restoration was impressive, fixing old slides with heavy colour casts in a single swoop and improving the colour balance of various other problematic images.

At first we weren't convinced of the need for separate scan heads for reflective and transparent media, but the quality of results allayed scepticism. Reflective media was pixel-sharp up to 2,400dpi, and transparencies at up to 4,000dpi – not quite in line with specifications, but fine for most scanning tasks and as good as any scanner we've seen, including

dedicated film scanners that cost over £100 more. Colour accuracy was hard to fault, with smooth greyscales. Reds were sometimes under-saturated and matt reflective media a touch too dark, but it wasn't hard to correct.

If you're serious about photography, there's now no need to splash out on separate film and flatbed scanners. The V700 handles both superbly and costs less than separate units of comparable quality.

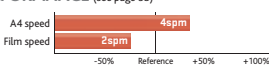
Ben Pitt

SUMMARY

- ✓ Excellent image quality
- ✓ Effective restoration features
- ✗ Competitive products are faster

FLATBED SCANNER 4,800dpi (reflective) and 6,400dpi (transparency) resolutions, 48-bit colour, USB Hi-Speed and FireWire interfaces
PART CODE B11B178022
SUPPLIER uk.insight.com
DETAILS www.epson.co.uk

PERFORMANCE (see page 58)



Also consider...

OLYMPUS SP-350

★★★★★

£210 inc VAT



The Olympus SP-350 may be small enough to fit in a handbag or a pocket, but its accessory hotshoe and threaded lens ring prove it's no mere point-and-click camera. It provides program, aperture priority, shutter priority and full manual controls, and histogram and exposure value (EV) readouts are there to help. In our tests it excelled at capturing detail both in bright and dark areas of high-contrast compositions.

The SP-350 has excellent image quality and is extremely competitive for such a versatile camera.



DIGITAL CAMERA 8 megapixels (3,264x2,448 pixels), 3x optical zoom, 25MB internal memory, xD-Picture Card slot
PART CODE 003753 SUPPLIER www.buyacamera.co.uk
DETAILS www.olympus.co.uk ✓ Superb image quality
✗ Not particularly fast FULL REVIEW Mar 2006

NIKON CoolPix 5600

★★★★★

£120 inc VAT



Nikon's CoolPix 5600 is a low-cost, no-frills camera. The lack of manual settings will put off the amateur photographer, but the point-and-click crowd will love its ease of use and excellent image quality.

The 5-megapixel sensor captures photographs in fine detail and with exemplary colours in a range of conditions. In low light without the flash it resorted to exposure times of up to two seconds, but we prefer this to underexposed, grainy images captured in low light with a short exposure. Quite a bargain.



DIGITAL CAMERA 5 megapixels (2,592x1,944 pixels), 3x zoom lens, 14MB internal memory and SD slot
PART CODE VAA310EO SUPPLIER www.buyacamera.co.uk
DETAILS www.nikon.co.uk ✓ Great photos in an affordable package ✗ Basic controls FULL REVIEW Jan 2006

PENTAX Optio M10

★★★★★

£153 inc VAT



The Optio M10 is available on the high street for £200, but many online stores are selling it for around £150, making it one of the most affordable 6-megapixel cameras we've seen.

There are a few clues to suggest that this is a budget camera: it's made of plastic and uses AA batteries rather than a lithium-ion cell, but it's compact and robust, and replacement AA batteries are easy to come by when you're on holiday. Battery life is passable from a pair of Duracell Plus batteries. Don't forget to budget for a large SD card, though, as the 22MB of onboard memory will soon get filled.

The video mode is disappointing, capturing at a 320x240-pixel resolution and its auto-exposure reacts lethargically to changes in lighting conditions. However, we were pleasantly surprised to find a 2½" screen at this price. Its 115,000-pixel resolution is only half that of the other cameras in this month's *What's New*, but the large size makes framing and reviewing shots a satisfying experience.

Pentax cameras are always easy to use and the M10 is no exception, although it has been dumbed down a little too much for our liking. Instead of a Function button for quick access to ISO, white balance and other settings, it has a green Mode button that gives quick access to cheesy picture frames such as a lacy heart, leaving no room for more

useful settings. There are various scene modes, including a useful Night Scene mode for taking pictures in very low light without the flash, and utterly odd ones such as six Pet modes for photographing dogs or cats with white, grey or black fur.

Fortunately, the standard mode includes the usual options we'd expect from a point-and-shoot camera. You have no direct control over exposure, manual focus or metering options, but flash, macro, self-timer, exposure compensation, white balance, ISO speed and focus area are all in place, as well as less common options such as sharpness, saturation and contrast.

The camera is a little slow to start, taking four seconds to power up and take a shot. Otherwise, its performance is decent, taking just two seconds between shots at the maximum image quality. Continuous mode captured five shots in five seconds, then continued at a shot every two seconds. However, previews aren't available in continuous mode and there's no optical viewfinder, so the standard drive mode

might prove better for rapid-fire shooting. Like all Pentax cameras, the M10 enables extremely fast browsing through pictures.

A high megapixel count doesn't necessarily translate to high image quality, particularly in low-cost cameras. Fortunately, the M10's low price isn't reflected in its image quality; this camera outperforms the two pricier 6-megapixel cameras



reviewed on page 32. Its flash is superb, illuminating large rooms and giving pleasing exposures when taking portraits at close proximity. The fully automatic mode uses the highest ISO setting (ISO 400) in low light to minimise blur from camera shake. This often leads to excessive image noise, but here it was barely evident. Most impressive was the sharpness and detail captured in photos, a step up from that of the Nikon and Acer cameras reviewed this month. The only significant fault was that colours could be a little muted, but this was easily remedied with the camera's saturation control. You may prefer to remedy this problem in your image-editing software, as you'll have more control and get better results.

The Optio M10 is pretty much everything a point-and-shoot digital camera should be: affordable, compact, quick and easy to use, and capable of producing excellent photos with minimal need to grapple with camera settings. It doesn't look particularly exciting, but the large screen adds an element of panache. Even after you've budgeted for rechargeable batteries and a large SD card, this is extremely good value and produces excellent photos.

Ben Pitt

SUMMARY

- ✓ Excellent image quality
- ✓ Low price
- ✗ Basic video mode

DIGITAL CAMERA 6 megapixels (2,816x2,112 pixels), 3x optical zoom, 22MB internal memory, SD slot, 2x AA batteries
PART CODE 022366
SUPPLIER www.rankhour.com
DETAILS www.pentax.co.uk

PERFORMANCE (see page 58)

Battery life **241 shots**
-50% Reference +50% +100%

EPSON Perfection 2580 Photo

★★★★★

£88 inc VAT



The Epson 2580 Photo's lid contains an unusual motorised film feeder for loading strips of negatives. It feels sturdy and was very quick in operation, previewing six negatives in just 31 seconds. Despite its modest optical resolution, the Perfection 2580's crisp and detailed film scans are excellent, as are its reflective scans.



SCANNER 2,400x4,800dpi optical resolution, 48-bit colour, USB Hi-Speed PART CODE B11B172122
SUPPLIER www.shopmagenta.com DETAILS www.epson.co.uk
✓ Excellent film scans ✗ Slight softness to reflective scans
FULL REVIEW Sep 2005

CANON EOS 350D

★★★★★

£496 inc VAT

The Canon EOS 350D's performance is excellent, capturing two shots a second for 20 shots. It's simple to use, too, with straightforward controls. The 350D produced the best-quality shots in our recent Labs test using the provided lens. This is an extremely impressive camera, especially at this price.



DIGITAL SLR CAMERA 8.0 million pixels (3,456x2,304), 3x optical zoom (18-55mm), CompactFlash slot, 7.4V, 720mAh li-ion battery PART CODE 0210B014AA
SUPPLIER www.amazon.co.uk DETAILS www.canon.co.uk
✓ Exceptional image quality ✗ Minor control issues
FULL REVIEW Jun 2006

CANON PowerShot A610

★★★★★

£166 inc VAT



Canon's PowerShot A610 is fairly large, but it fits comfortably in your hand. Its picture quality is amazing. It coped flawlessly with tricky lighting conditions such as high contrast and near darkness, and its macro function made objects just 2cm wide fill the picture. With an excellent video mode and manual focus, the A610 is better than many more expensive cameras.



DIGITAL CAMERA 5 megapixels (2,592x1,944 pixels), 4x optical zoom, 32MB SD card PART CODE 0322B007AA
SUPPLIER www.savastore.com DETAILS www.canon.co.uk
✓ Fantastic image quality ✗ Bulky design
FULL REVIEW Jan 2006

NIKON Coolpix S5

★★★★

£249 inc VAT

Nikon's S5 is an extremely thin yet curvaceous camera. It uses the same chassis as the S6, which Kate Moss is currently advertising, but drops the WiFi and costs £40 less.

It's quick to use, taking two seconds between shots and just three with the flash. A continuous mode captured 31 photos in 30 seconds, although these came in erratic bursts. The options and controls are typical for a compact digital camera, and the five-way pad doubles as a wheel for quick adjustments. The li-ion battery lasted for 263 shots from a single charge.

The 230,000-pixel, 2½" screen makes reviewing shots a real pleasure, and there's a slideshow function that pans and zooms across pictures, complete with dreadful musical accompaniment. Taking photos is a pleasant experience, although we'd prefer to have a readout of the shutter speed before taking a shot; even though you can't adjust this directly, knowing its value can help you avoid blur from camera shake. A Face Priority mode identifies faces to focus on and works well, but selecting



it makes various other settings such as ISO and white balance unavailable.

Image quality was mostly excellent in our tests, with warm, vibrant colours and sharp detail, though it wasn't up to the standard of Pentax's M10 (see page 31). There was little noise at ISO 400,

but the camera tended to use long exposure times rather than high ISO speeds in low light, producing shots that were well exposed but blurred. The flash performed well in close proximity but badly when attempting to illuminate large subjects.

This is a highly desirable camera, but its stylish looks don't justify the £100 price disparity with Pentax's equally capable Optio M10.

Ben Pitt

SUMMARY

- ✓ Stylish design
- ✓ Fun to use
- ✗ Too expensive

DIGITAL CAMERA 6 megapixels (2,816x2,112 pixels), 3x optical zoom, 21MB internal memory, SD slot, 730mAh li-ion battery
PART CODE VAA550B1
SUPPLIER www.savastore.com
DETAILS www.europe-nikon.com

PERFORMANCE (see page 58)



ACER CU-6530

★★★★

£194 inc VAT

Previous Acer cameras have delivered high specifications at aggressively low prices, but the CU-6530 sees the company taking a different tack. £194 is typical for a 6-megapixel camera, but the CU-6530 is considerably more compact and stylish than previous Acer models.

It's well specified in areas that don't usually make the headlines: the 2½" LCD screen has a generous 230,000-pixel resolution and the camera comes with a 64MB SD card, a USB charging cradle and a protective case. The case had a strange fishy smell when we first unpacked it, but this dissipated after a few weeks. A li-ion battery is included, but it has quite a poor life.

The camera is easy to use, although the menus could be better laid out; regularly used settings appear at the bottom of the list of options. We don't like the all-or nothing approach to sounds: we find it useful to have a noise that indicates when a picture has been taken, but not every time a button is pressed. It's not particularly fast, either, taking between two and four seconds between shots, rising



to six with the flash enabled. Continuous mode captures five shots in three seconds but takes 10 seconds to recover. There's a fair amount of user control, including light metering modes, a contrast control and automatic exposure bracketing.

In agreeable lighting conditions, this camera

produced excellent pictures, and its macro mode was impressive. But in trickier conditions such as low light and during flash photography it often came unstuck, producing poorly exposed shots, and purple fringing was evident in high-contrast scenes.

This is Acer's best camera to date, but its image quality still leaves room for improvement.

Ben Pitt

SUMMARY

- ✓ Smart, ultra-compact design
- ✗ Various image-quality niggles
- ✗ Short battery life

DIGITAL CAMERA 6.1 megapixels (2,934x2,171 pixels), 3x optical zoom, 64MB SD card, 820mAh li-ion battery
PART CODE AM.K0103.001
SUPPLIER www.morecomputers.co.uk
DETAILS www.acer.co.uk

PERFORMANCE (see page 58)



CHOOSING A... Digital Camera

Follow the steps to find your ideal specs

RESOLUTION: 4 megapixels
ZOOM: 3x optical
MONITORING: 1.8" colour LCD screen
SUPPLIED MEMORY: 16MB
BATTERIES: Disposable
 Recommended minimum in grey

1 A digital camera with the specifications shown in grey above will suit someone looking for a point-and-click camera that produces images that look decent when printed at 7x5".

It has an LCD screen for previewing, reviewing and deleting shots and for changing the settings. These days such cameras cost under £100. Cheaper models are available, but their basic quality means they are best avoided.

2 An additional optical viewfinder allows you to take pictures when strong sunlight makes the LCD screen hard to see. It also lets you preserve batteries by switching the screen off.

3 The camera's top resolution depends on the size of its charge-coupled device (CCD) sensor. A 4-megapixel camera produces 2,288x1,712 photos, but with higher resolutions you can enlarge photos more without making them blocky. Five megapixels is common, and you can get six or eight megapixels without spending a fortune.

4 A digital zoom only guesses the extra detail required to zoom in on a subject. Far better is an optical zoom with a moving lens that enlarges the image projected on the CCD. The lens should also have a quick and accurate auto-focus.

5 Serious photographers need manual control over focus, aperture, shutter speed and white balance and, ideally, plenty of buttons for quick access to these functions. Many cameras offer preset modes to improve results.

6 Consider hidden costs. Most cameras will require a memory card upgrade to at least 128MB if they are to hold more than a dozen pictures at a time. Some come with internal rechargeable batteries, making the camera compact, while some also accept AA batteries, allowing you to carry spares.